

**Commonwealth of Kentucky  
Energy and Environment Cabinet  
Department for Environmental Protection  
Division for Air Quality  
200 Fair Oaks Lane, 1<sup>st</sup> Floor  
Frankfort, Kentucky 40601  
(502) 564-3999**

**Draft**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:020**

**Permittee Name:** AGC Flat Glass North America, Inc  
**Mailing Address:** 201 Duncannon Lane, Richmond, Kentucky  
40475

**Source Name:** AGC Flat Glass North America, Inc - Richmond  
Plant  
**Mailing Address:** 201 Duncannon Lane  
Richmond, Kentucky 40475

**Source Location:** 201 Duncannon Lane

**Permit:** V-08-046  
**Agency Interest:** 2796  
**Activity:** APE20080001  
**Review Type:** Title V, Operating  
**Source ID:** 21-151-00064

**Regional Office:** Frankfort Regional Office  
643 Teton Trail, Suite B  
Frankfort, KY 40601  
(502) 564-3358

**County:** Madison

**Application  
Complete Date:** January 1, 2009  
**Issuance Date:**  
**Revision Date:**  
**Expiration Date:**

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**John S. Lyons, Director  
Division for Air Quality**

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	Permit type	Log or Activity#	Complete Date	Issuance Date	Summary of Action
V-03-055	Initial Issuance	54485	12-4-2003	May 3, 2004	Renewal Permit
V-03-055R1	Administrative Amendment	APE20070003	9-20-07	---	Name Change
V-08-046	Renewal	APE20080001	XX	XX	Renewal Permit

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****Emission Unit: 01 (P1)      Raw Material Handling**

Equipment includes: An unloading hopper, storage silos, weighing and mixing equipment, and distribution conveyors. Constructed 1998

Machine Point 1: Batch Material Handling controlled by baghouse #1  
Machine Point 2: Batch Material Handling controlled by baghouse #2  
Machine Point 3: Batch Material Handling controlled by baghouse #3  
Machine Point 4-13: Batch Material Handling controlled by baghouse #4-13  
Machine Point 14: Batch Material Handling controlled by baghouse #14  
Machine Point 15: Batch Material Handling controlled by baghouse #15  
Machine Point 16-18: Batch Material Handling controlled by baghouse #16-18

**APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality  
401 KAR 59:010, New Process operations

**1.      Operating Limitations:**

None

**2.      Emission Limitations:**

- a. Pursuant to 401 KAR 51:017, emissions of particulate matter shall not exceed the following limitations:

Machine Point 1:	0.137 pound/hour
Machine Point 2:	0.429 pound/hour
Machine Point 3:	0.154 pound/hour
Machine Point 4-13:	0.021 pound/hour, each
Machine Point 14	0.060 pound/hour
Machine Point 15	0.004 pound/hour
Machine Point 16-18	0.009 pound/hour, each

- b. Pursuant to 401 KAR 59:010, Section 3(1), the visible emissions from the each exhaust vent shall not equal or exceed 20 percent opacity.

**Continuing Compliance Demonstration Method:**

To demonstrate compliance with the lb/hr particulate emission rate limitation, the rate will equal the monthly operating rate (tons/month) x Emission factor (lb PM/ton) / Hours of operation per month (hr/month) x [1 – control device efficiency].

The permittee shall assure continuing compliance with the particulate emission and opacity limitations by ensuring proper operation of baghouses. Proper operation of baghouses can be ensured by fulfilling requirements specified under Subsection 4, 5, and 7 of this Section.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements:**

Pursuant to 401 KAR 52:020, Section 26, the permittee shall read the opacity of emission from exhaust vent by Reference Method 9 on a monthly basis.

**4. Specific Monitoring Requirements:**

Pursuant to 401 KAR 51:017 and 401 KAR 52:020, Section 26, the permittee shall monitor the following:

- a. The permittee shall monitor the amount of raw material (pounds or tonnage) handled on a daily basis.
- b. The permittee shall maintain, and operate according to manufacturer's specifications a monitoring device for the measurement of the pressure drop across the fabric filter (baghouses #1-13).
- c. The permittee shall perform a monthly inspection of the fabric filters (baghouses #1-18) to ensure that there are no broken/torn bags.

**5. Specific Recordkeeping Requirements:**

Pursuant to 401 KAR 51:017, the permittee shall maintain records of the following:

- a. The pressure drop across the fabric filter (baghouses #1-18) shall be recorded once per calendar day.
- b. Daily amount of raw material handled (pounds or tonnage) and hours of operation.
- c. Records documenting results of each opacity reading by EPA Reference Method 9.
- d. Logs of monthly inspections conducted for fabric filters (baghouses #1-18), including observations, results and maintenance performed as a result of inspections.

**6. Specific Reporting Requirements:**

See Section F

**7. Specific Control Equipment Operating Conditions:**

- a. Pursuant to 401 KAR 50:055, the fabric filters shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and standard operating practices.
- b. Pursuant to 401 KAR 52:020, Section 26, records regarding the maintenance and operation of the fabric filters shall be maintained.
- c. Pursuant to 401 KAR 52:020, Section 26, the permittee shall determine the operating pressure drop across the fabric filter (baghouses #1-18) during the shake down period. This range shall be maintained at all times when the systems are operating.
- d. See Section E for further requirements.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Emission Unit: 02 (P2)      Melting Furnace**

Rated Capacity: 200 MMBtu/hour

Year Constructed: 1998

**APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality

401 KAR 60:005, Section (3)(1)(kk), Standards of performance for glass manufacturing plants incorporating by reference 40 CFR 60, Subpart CC

401 KAR 63:020, Potentially Hazardous Matter or Toxic Substances

401 KAR 63:021, Existing sources emitting toxic air pollutants (State Only-Regulation)

**1.      Operating Limitations:**

- a. Pursuant to 401 KAR 51:017, the permittee shall limit the flat glass production to 600 tons/day with fuel restricted to natural gas.
- b. Pursuant to 401 KAR 51:017, Section 9, the permittee shall limit the salt cake usage to 10 pounds per 1000 pounds of sand.
- c. Pursuant to 401 KAR 51:017, Section 9, the permittee shall recycle all cullet to reduce the raw material required to produce a ton of salable glass.
- d. Pursuant to 401 KAR 63:020, persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

**2.      Emission Limitations:**

- a. Pursuant to 401 KAR 60:005 and 401 KAR 51:017, emissions of particulate matter shall not exceed 1.0 pound per ton of glass production and a maximum of 25.0 pounds/hour.
- b. Pursuant to 401 KAR 51:017, sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 2.0 pounds per ton of glass production and a maximum of 50.0 pounds/hour based on a 24-hour average.
- c. Pursuant to 401 KAR 51:017, nitrogen oxides (NO<sub>x</sub>) emissions shall not exceed 7.0 pounds per ton of glass production and a maximum of 175 pounds/hour, on a 30-day rolling average.
- d. The permittee has self-imposed a sulfuric acid emission limitation of 1.59 pounds/hour based on a 24-hour average to preclude applicability of 401 KAR 51:017.
- e. Pursuant to 401 KAR 60:005, Section (3)(1)(kk), incorporating by reference 40 CFR 60.293(c), the visible emissions from the furnace stack shall not exceed the opacity standard of 13.42 percent set during the performance test, which is based on upper confidence level of 99%.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****State Origin Requirements:**

- f. Pursuant to 401 KAR 63:021, selenium emission shall not exceed 20 pounds/hour based on an 8-hour average.
- g. Pursuant to 401 KAR 63:021, cobalt emission shall not exceed 200 pounds/year based on an 8-hour average.
- h. Pursuant to 401 KAR 63:021, nickel oxide emission shall not exceed 2.29 pounds/hour based on a 1-hour average.

**Continuing Compliance Demonstration Method:**

- a. The permittee shall demonstrate compliance with the particulates allowable emission by calculating emissions using the following equations:

Daily average emission rate (lb/hour)

$$= [\text{Amount of gas burned (million cu. ft./day)} \times \text{Heating value of gas (Btu/cu. ft.)} \times \text{Emission factor determined from initial stack test data (lb/MMBtu)}] / \text{Hours of operation in that calendar day}$$

Daily average emission rate (lb/ton of glass pulled)

$$= [\text{Daily average particulates emission rate (lb/hour)} \times \text{Hours of operation of the furnace} / \text{tons of glass pulled in that calendar day}]$$

- b. The permittee shall use continuous emission monitoring data to demonstrate continuous compliance with the nitrogen oxides emission limitation in accordance with 40 CFR 75.
- c. The permittee shall use continuous opacity monitoring data to demonstrate continuous compliance with the opacity limitation.
- d. The permittee shall demonstrate compliance with the allowable sulfur dioxide and sulfuric acid emissions on a 24-hour average basis by calculating emissions based on sulfur content in raw material feed rate to the furnace and emission factors developed based on stack test information.
- e. Continuing compliance with the particulate emission limitation as specified in Subsection 2 under this emission unit and monitoring of raw material usage will ensure continuing compliance with selenium, cobalt and nickel oxide emission limitations.

**3. Testing Requirements:**

- a. Pursuant to 401 KAR 50:045, performance tests to demonstrate compliance with particulate matter and sulfur dioxide emissions shall be conducted annually.
- b. The permittee shall assure compliance with the allowable particulate emissions using the method specified in 401 KAR 60:005, Section (3)(1)(kk), incorporating by reference 40 CFR 60.296.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- c. Pursuant to 401 KAR 50:045, and to satisfy the requirements for 401 KAR 63:020, the permittee shall perform testing and report the results to the Division at the same time as the performance test to determine emission rates for chromium, cobalt, nickel oxide and titanium, which are emitted by the melting furnace for use in SCREEN3 and if needed more refined modeling using models approved by the Division to determine levels of concern (LOC) of these emissions.
- d. See Section D, Source Emission Limitations and Testing Requirements, for additional requirements.

**4. Specific Monitoring Requirements:**

- a. Pursuant to 401 KAR 60:005, Section (3)(1)(kk), incorporating by reference 40 CFR 60.293(c), the permittee shall maintain, and operate a continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the affected facility.
- b. Pursuant to 401 KAR 51:017, the permittee shall use a continuous emission monitoring (CEM) system for the measurement of nitrogen oxides emissions from the furnace.
- c. Pursuant to 401 KAR 52:020, Section 26, the permittee shall monitor the daily glass production rate (tonnage) and hours of operation of the furnace.
- d. Pursuant to 401 KAR 52:020, Section 26, the permittee shall monitor amount of each raw material feed (weight of each raw material in pounds or in tons) to the furnace on daily basis.
- e. Pursuant to 401 KAR 52:020, Section 26, the permittee shall monitor the amount of sulfur fed to the furnace based on the daily amount of salt cake usage information.
- f. Pursuant to 401 KAR 52:020, Section 26, the permittee shall monitor the amount of natural gas burned on a daily basis.

**5. Specific Recordkeeping Requirements:**

Pursuant to 401 KAR 51:017, the permittee shall maintain records on site of the following:

- a. Daily glass production rate (tonnage) from the furnace.
- b. Daily raw material feed rate (pounds or tonnage) to the furnace.
- c. Opacity monitoring data gathered by continuous opacity monitoring system.
- d. Daily record of the amount of sulfur fed into the furnace.
- e. Daily record of amount of natural gas burned and hours of operation of the furnace.
- f. Pursuant to 401 KAR 59:005, Section 3, the owner or operator of the melting furnace shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring



**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 401 KAR 59:005, and recorded in a permanent form suitable for inspection.

- g. Records, including those documenting the results of each compliance test and all other records and reports required by this permit, shall be maintained.
- h. Pursuant to 401 KAR 59:005, Section 3, the owner or operator of the unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the emissions unit, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.

**6. Specific Reporting Requirements:**

- a. Pursuant to 401 KAR 52:020, Section 26, the permittee shall report exceedances of permitted glass production rate.
- b. Pursuant to 401 KAR 59:005, Section 3(3), the permittee shall submit for every calendar quarter a written report of excess opacity emissions to the Division.
- c. Pursuant to 401 KAR 59:005, Section 3, minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:
  - 1) The magnitude of the excess emissions computed in accordance with the 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
  - 2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the emissions unit. The nature; and cause of any malfunction (if known), and the corrective action taken or preventive measures adopted.
  - 3) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
  - 4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**7. Specific Control Equipment Operating Conditions:**

- a. Pursuant to 401 KAR 50:055, Section 5, the permittee shall operate 3R technology as an innovative technology to maintain compliance with permitted NO<sub>x</sub> emission limitations, in accordance with manufacturer's specifications and / standard operating practices.
- b. Pursuant to 401 KAR 52:020, Section 26, records regarding the maintenance and operation of the control equipment shall be maintained.
- c. See Section E for further requirements

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Emission Unit: 03 (P3 )      Annealing Lehr**

Equipment includes: Rollers, electric heating elements, fans, tube heat exchangers, and SO<sub>2</sub> application equipment. Constructed 1998

**APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality

**1.      Operating Limitations:**

None

**2.      Emission Limitations:**

Pursuant to 401 KAR 51:017, emissions of sulfur dioxide shall not exceed 0.106 lb/hour.

**Continuing Compliance Demonstration Method:**

Hourly Emission Rate (lb/hour) = 1.32 percent x the SO<sub>2</sub> usage rate (lb/hour)

**3.      Testing Requirements:**

None

**4.      Specific Monitoring Requirements:**

Pursuant to 401 KAR 51:017, the permittee shall monitor sulfur dioxide usage rate on a daily basis.

**5.      Specific Recordkeeping Requirements:**

Pursuant to 401 KAR 51:017, the permittee shall maintain records of the following:

- a. Daily amount of sulfur dioxide usage in the annealing Lehr.
- b. Daily hours of operation of the annealing Lehr.

**6.      Specific Reporting Requirements:**

See Section F

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**Emission Unit: 04 (P4 )      Cutting Line**  
Constructed 1998

### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality

**1.      Operating Limitations:**

None

**2.      Emission Limitations:**

None

**Compliance Demonstration Method:**

None

**3.      Testing Requirements:**

None

**4.      Specific Monitoring Requirements:**

Pursuant to 401 KAR 51:017, the permittee shall monitor the following:

- a. Type and amount of cutting oil used on a daily basis.
- b. Type and amount of thinner used on a daily basis.

**5.      Specific Recordkeeping Requirements:**

Pursuant to 401 KAR 51:017, the permittee shall maintain records of the following:

- a. Type and amount of cutting oil used on a daily basis.
- b. Type and amount of thinner used on a daily basis.

**6.      Specific Reporting Requirements:**

See Section F

**7.      Specific Control Equipment Operating Conditions:**

No

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**Emission Unit: 05 (P5)      Cullet Return System**  
Constructed 1998

**APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality  
401 KAR 59:010, New process operations

**1.      Operating Limitations:**  
None

**2.      Emission Limitations:**

- a. Pursuant to 401 KAR 51:017, emissions of particulate matter shall not exceed 0.031 pound/hour.
- b. Pursuant to 401 KAR 59:010, Section 3(1), the visible emission from the stack shall not equal or exceed 20 percent opacity.

**Continuing Compliance Demonstration Method:**

The permittee shall assure continuing compliance with the particulate emission and opacity limitations by ensuring proper operation of baghouses. Fulfilling requirements specified under Subsection 4, 5, and 7 of this Section can ensure proper operation of baghouses.

**3.      Testing Requirements:**

Pursuant to 52:020, Section 26, the permittee shall read the opacity of emission from the stack by EPA Reference Method 9 on a monthly basis.

**4.      Specific Monitoring Requirements:**

Pursuant to 401 KAR 51:017, the permittee shall monitor the following:

- a. The permittee shall maintain, and operate according to manufacturer's specifications a monitoring device for the measurement of the pressure drop across the fabric filter.
- b. The permittee shall perform a monthly inspection of the fabric filter to ensure that there are no broken/torn bags.
- c. The permittee shall monitor the amount of cullet returned and hours of operation on a daily basis.

**5.      Specific Recordkeeping Requirements:**

Pursuant to 401 KAR 51:017, the permittee shall maintain records of the following:

- a. The pressure drop across the fabric filter shall be recorded once per calendar day.
- b. Daily amount of cullet returned and hours of operation of the cullet return system.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- c. Pursuant to 401 KAR 52:020, Section 26, records documenting results of each opacity reading by EPA Reference Method 9 shall be maintained for inspection by dully authorized representative of the Division.

**6. Specific Reporting Requirements:**

See Section F

**7. Specific Control Equipment Operating Conditions:**

- a. Pursuant to 401 KAR 50:055, the fabric filter shall be operated as necessary to maintain compliance with permitted emission limitation, in accordance with manufacturer's specifications and standard operating practices.
- b. Pursuant to 401 KAR 52:020, Section 26, records regarding the maintenance and operation of the fabric filter shall be maintained.
- c. Pursuant to 401 KAR 52:020, Section 26, the permittee shall determine the operating pressure drop across the fabric filter during the shake down period. This range shall be maintained all time when the systems are operating.
- d. See Section E for further requirements.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Emission Unit: 06 (P8 )      Emergency Diesel Generator**

Rated Capacity: 1950 horsepower

Year Constructed: 1998

**APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality

**1.      Operating Limitations:**

Pursuant to 401 KAR 51:017, the permittee shall limit the operation of the emergency diesel generator to 500 hours/year.

**2.      Emission Limitations:**

- a. Pursuant to 401 KAR 51:017, emissions of particulate matter shall not exceed 0.341 ton/year.
- b. Pursuant to 401 KAR 51:017, emissions of sulfur dioxide shall not exceed 0.79 ton/year.
- c. Pursuant to 401 KAR 51:017, emissions of nitrogen oxides shall not exceed 11.7 tons/year.

**Continuing Compliance Demonstration Method:**

The permittee may assure continuing compliance with the particulate matter, sulfur dioxide, and nitrogen oxides emission limitations by ensuring less than 500 hours of operation per year and burning fuel oil with less than 0.5 percent sulfur content.

**3.      Testing Requirements:**

None

**4.      Specific Monitoring Requirements:**

- a. Pursuant to 401 KAR 52:020, Section 26, the permittee shall monitor the fuel usage rate and the hours of operation of the affected facility on a monthly basis.
- b. Pursuant to 401 KAR 52:020, Section 26, the permittee shall monitor the sulfur content of fuel by the fuel supplier's certification.

**5.      Specific Recordkeeping Requirements:**

- a. Pursuant to 401 KAR 52:020, Section 26, the permittee shall maintain records of monthly fuel usage rate and hours of operation of the stand-by-generator.
- b. Pursuant to 401 KAR 52:020, Section 26, records of fuel supplier's certification on the sulfur content in the fuel shall be maintained.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

6. **Specific Reporting Requirements:**  
See Section F



**SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

	<u>Description</u>	<u>Generally Applicable Regulation</u>
1.	39 natural gas-fired space/water heaters 400,000 Btu/hour each	None
2.	12 natural gas-fired space/water heaters 100,000 Btu/hour each	None
3.	Fuel oil storage tank 5000 gallons capacity	None
4.	Cullet piles	401 KAR 63:010
5.	Malic acid spray booth	401 KAR 59:010
6.	Oil/Water separator	None
7.	Dust Collector for Auto glass stacker	None
8.	Lucor Powder Machines	None

## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Particulate, sulfur dioxide, nitrogen oxides and visible (opacity) emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. To demonstrate compliance with 401 KAR 63:020, within 6 months of the issuance date of this permit, the permittee shall perform a stack test to determine chromium, cobalt, nickel oxide and titanium emission rates from the melting furnace. Testing and reporting of results of such testing shall be conducted in accordance with Section G5, Testing Requirements, of this permit.

Emission rates determined by testing shall be used in SCREEN3 and reported to the Division at the same time as the results of the performance tests. If the predicted annual concentrations exceed the levels of concern (LOC) for either pollutant, the permittee shall conduct more refined modeling using models approved by the Division. If the predicted concentrations of chromium, cobalt, nickel oxide and titanium for either pollutant, within 90 days of the stack test, exceed the levels of concern the permittee shall propose a plan to reduce the pollutant emissions below levels of concern (LOC) or provide evidence that the permittee is not emitting potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants [401 KAR 63:020].

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality  
Frankfort Regional Office  
643 Teton Trail, Ste B  
Frankfort, KY 40601

U.S. EPA Region 4  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth St.  
Atlanta, GA 30303-8960

Division for Air Quality  
Central Files  
200 Fair Oaks Lane, 1<sup>st</sup> Floor  
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

## SECTION G - GENERAL PROVISIONS

### 1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
  - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-15-b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) 2.].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) 4.].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) 1.].



**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - (1) Applicable requirements that are included and specifically identified in the permit and
  - (2) Non-applicable requirements expressly identified in this permit.

**2. Permit Expiration and Reapplication Requirements**

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

**3. Permit Revisions**

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

**4. Construction, Start-Up, and Initial Compliance Demonstration Requirements**

No construction authorized by this permit.

**SECTION G - GENERAL PROVISIONS (CONTINUED)****5. Testing Requirements**

- a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

**6. Acid Rain Program Requirements**

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

**7. Emergency Provisions**

- a. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- (2) The permitted facility was at the time being properly operated;
  - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
  - (5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
  - c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

**8. Ozone Depleting Substances**

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
  - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

## **SECTION G - GENERAL PROVISIONS (CONTINUED)**

### 9. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center  
P.O. Box 1515  
Lanham-Seabrook, MD 20703-1515.

- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

## **SECTION H - ALTERNATE OPERATING SCENARIOS**

None

**SECTION I - COMPLIANCE SCHEDULE**

None